

REMARKS

Claims 1-4 and 20 are pending. Applicants gratefully acknowledge the indication that claim 20 would be allowable if rewritten in independent form.

Claims 1-4 were rejected under 35 USC §103(a) as being unpatentable over Nishida in view of Kobayashi et al. Favorable reconsideration of this rejection is earnestly solicited.

Nishida is cited by the Examiner for its disclosure of a solid support which is melted when pressed by a heated bonding tool 8. The Examiner acknowledges that Nishida fails to teach melting of a conductive bonding material on the terminal pad prior to contacting the terminal conductor with the conductive bonding material.

Kobayashi et al. is applied by the Examiner for its disclosure of melting conductive bonding material before the material to be connected is mounted. The Examiner argues that it would have been obvious for one of ordinary skill in the art to modify the mounting process of Nishida by melting the conductive bonding material on the terminal pad before the material is connected as taught by Kobayashi et al. in order to improve the strength of bonding. Applicants respectfully traverse this position.

As shown in Figs. 8B and 8C of Nishida, the chip 1 is pressed against the circuit board by the heated bonding tool 8 while the protruding electrodes contact with the electrodes 5. If one of ordinary skill in the art would have modified the teachings of Nishida to melt the conductive

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bonding material on the terminal pad of Nishida, the intended function of Nishida would be destroyed. That is, if the bump 3 is melted, it would not be possible for the bump 3 to penetrate through the thermosetting sheet. Indeed, Nishida discloses that the bump, in the solid state, is deformed during the pressing process.

Claim 1 requires melting a conductive bonding material on the terminal pad and thereafter melting the solid support so as to move down the electronic component toward to the substrate, thereby contacting the terminal conductor with the conductive bonding material melting on the corresponding terminal pad. A combination of Nishida and Kobayashi et al. fails to teach or suggest performance of these steps in the recited order.

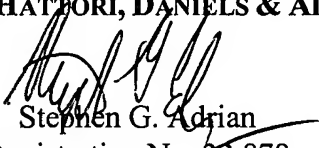
For at least the foregoing reasons, the claimed invention distinguishes over the cited art and defines patentable subject matter. Favorable reconsideration is earnestly solicited.

Should the Examiner deem that any further action by applicants would be desirable to place the application in condition for allowance, the Examiner is encouraged to telephone applicants' undersigned attorney.

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If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,
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Enclosure: Petition for Extension of Time